This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended) An antagonist of ghrelin, wherein the antagonist is a nucleic acid which specifically binds~~, and whereby preferably the nucleic acid is binding~~ to ghrelin.

Claim 2 (currently amended) An antagonist of the GHSR 1a receptor system~~, wherein the antagonist is a~~ which is the nucleic acid~~, and whereby preferably the nucleic acid is binding to the ligand of the receptor and whereby preferably the ligand is~~ which specifically binds to ghrelin of claim 1.

Claim 3 (original) The antagonist according to claim 1 or 2, wherein the nucleic acid comprises at least one L-nucleotide.

Claim 4 (currently amended) The antagonist according to ~~any of~~ claim[[s]] 1 or 2 ~~to 3~~, wherein the antagonist is an L-nucleic acid.

Claim 5 (canceled)

Claim 6 (currently amended) A nucleic acid ~~binding to ghrelin, preferably a L-nucleic acid binding~~ which specifically binds to L-ghrelin.

Claim 7 (canceled)

Claim 8 (currently amended) A nucleic acid ~~having a sequence which is selected from the group comprising the sequences according to SEQ. ID. No. 7 to SEQ. ID. No. 125~~ which is one of SEQ ID NO:7 to SEQ ID NO:125.

Claim 9 (original) The nucleic acid according to claim 8, wherein the nucleic acid comprises at least one L-nucleotide.

Claim 10 (currently amended) The nucleic acid according to ~~any of claims 8 to~~ claim 8 or 9, wherein the nucleic acid is an L-nucleic acid.

Claim 11 (currently amended) The nucleic acid ~~according to any of claims 8 to 10,~~ of claim 8 or 9 wherein the nucleic acid is selected from the group ~~comprising~~ consisting of DNA, RNA and combinations thereof.

Claim 12 (currently amended) The nucleic acid ~~according to any of claims 8~~ of claim 8 or 9, ~~to 11~~ wherein the Kd of the nucleic acid is less than 1 μM~~, preferably less than 0.25 μM, more preferably less than 0.1 μM, and most preferably less than 0.01 μM~~.

Claim 13 (currently amended) The nucleic acid ~~according to any of claims 8~~ of claim 8 or 9 ~~to 12~~, wherein the Kd of the nucleic acid is more than 100 nM~~, preferably more than 10 nM, more preferably more than 1 nM and most preferably more than 0.05 nM~~.

Claim 14 (currently amended) The nucleic acid ~~according to any~~ of claim 8 or 9 ~~to 13~~, wherein the nucleic acid is ~~of a length selected from the group comprising~~ 15 to 150 nucleotides in length~~, 20 to 100 nucleotides, 20 to 80 nucleotides, 20 to 60 nucleotides, 20 to 50 nucleotides and 30 to 50 nucleotides~~.

Claim 15 (canceled)

Claim 16 (currently amended) A method for making the ~~generation and/or identification of a~~ nucleic acid of claim 6 or 8, ~~binding to a target molecule, preferably of a nucleic acid according to any of claims 6 to 14,~~ comprising the ~~following~~ steps:

a) generating a heterogeneous population of nucleic acids;

b) contacting the population of step a) with ~~the target molecule~~ ghrelin;

c) separating the nucleic acid(s) not interacting with ~~the target molecule~~ ghrelin;

d) optionally separating the nucleic acid(s) interacting with ~~the target molecule~~ ghrelin; and

e) optionally sequencing the nucleic acid(s) interacting with ~~the target molecule,~~

~~characterized in that the target molecule is~~ ghrelin.

Claim 17 (currently amended) The method according to claim 16, further comprising ~~wherein subsequent to step c) a step ca) is carried out, whereby step ca) consists of~~ amplification of the nucleic acid(s) interacting with ~~the target molecule~~ ghrelin.

Claim 18 (original) The method according to claim 16 or 17, wherein steps b) to d) are repeated.

Claim 19 (canceled)

Claim 20 (currently amended) A ~~M~~method for ~~the generating of an~~ making the L-nucleic acid of claim 10 ~~binding to a target molecule in the natural configuration~~ comprising the following steps:

a) generating a heterogeneous population of D-nucleic acids;

b) contacting the population of step a) with ~~an optical antipode of the target molecule~~ D-ghrelin;

c) separating the D-nucleic acid not interacting with ~~the optical antipode of the target molecule~~ D-ghrelin;

d) sequencing the D-nucleic acid interacting with ~~the optical antipode of the target molecule~~ D-ghrelin; and

e) synthesizing the L-nucleic acid sequence(s) which is/are identical to the sequence of the D-nucleic acid(s) obtained in step d)~~;characterized in that the target molecule is L-ghrelin and the optical antipode of the target molecule is the D-ghrelin~~.

Claim 21 (currently amended) The ~~M~~method according to claim 20 ~~characterized in that subsequent to step c) the following step is introduced:~~

~~ca)~~ further comprising amplifying the D-nucleic acid interacting with ~~the optical antipode of~~ D-ghrelin ~~the target molecule~~.

Claim 22 (currently amended) The ~~M~~method according to ~~any of claims 20 to~~ claim 20 or 21, characterized in that steps b) to e) are repeated.

Claim 23 (canceled)

Claim 24 (currently amended) ~~Use of a nucleic acid according to any claims 6 to 17 and/or of an antagonist according to any of claims 1 to 5 for the manufacture of a medicament~~ A method of treating a disorder comprising ghrelin or GHSR1a, comprising the step of administering to a patient in need of treatment the nucleic acid of claim 6 or 8, or the antagonist of claim 1 or 2.

Claim 25 (currently amended) The method of ~~Use according to~~ claim 24 ~~characterized in that medicament is for the treatment of a disease or~~ wherein the disorder is selected from the group ~~comprising~~ consisting of obesity[[,]]; ~~the~~ improper regulation of energy balance[[,]]; improper appetite ~~and~~ or body weight[[,]]; eating disorders[[,]]; diabetes[[,]]; improper glucose metabolism[[,]]; tumour[[,]]; improper blood pressure and cardiovascular disease[[s]].

Claim 26 (currently amended) A ~~C~~composition comprising ~~a~~ the nucleic acid ~~according to any~~ of claim[[s]] 6 or 8 ~~to 14 and/~~or ~~an~~ the antagonist ~~according to any~~ of claim[[s]] 1 or 2 ~~to 5~~, and a pharmaceutical acceptable carrier.

Claim 27 (currently amended) A ~~C~~complex comprising ghrelin and ~~any of~~ the nucleic acid[[s]] ~~according to any~~ of claim[[s]] 6 or 8 ~~to 14, preferably the complex is a crystalline complex~~.

Claim 28 (canceled)

Claim 29 (currently amended) A ~~Method~~ method for ~~the~~ screening ~~of~~ for a ghrelin antagonist comprising the following steps:

- providing a candidate ghrelin antagonist,

- providing ~~a~~ the nucleic acid according to ~~any of claims~~ claim 6 ~~to 14~~ or 8, ~~and~~/or ~~an~~ the antagonist according to ~~any of claims~~ claim 1 ~~to 5~~ or 2,

- providing a test system providing a signal in the presence of a ghrelin antagonist, and

- determining whether the candidate ghrelin antagonist is a ghrelin antagonist.

Claim 30 (currently amended) A ~~K~~kit ~~for the detection of ghrelin,~~ comprising [[a]] the nucleic acid ~~according to any~~ of claim[[s]] 6 or 8, ~~to 14 and/~~or ~~an~~ the antagonist ~~according to any~~ of claim[[s]] 1 or 2 ~~to 5~~.

Claim 31 (new) The nucleic acid of claim 12, wherein the Kd is less than 0.25 μM.

Claim 32 (new) The nucleic acid of claim 31, wherein the Kd is less than 0.1 μM.

Claim 33 (new) The nucleic acid of claim 32, wherein the Kd is less than 0.01 μM.

Claim 34 (new) The nucleic acid of claim 13, wherein the Kd is more than 10 nM.

Claim 35 (new) The nucleic acid of claim 34, wherein the Kd is more than 1 nM.

Claim 36 (new) The nucleic acid of claim 35, wherein the Kd is more than 0.05 nM.

Claim 37 (new) The nucleic acid of claim 14, wherein the nucleic acid is 20 to 100 nucleotides in length.

Claim 38 (new) The nucleic acid of claim 37, wherein the nucleic acid is 20 to 80 nucleotides in length.

Claim 39 (new) The nucleic acid of claim 38, wherein the nucleic acid is 20 to 60 nucleotides in length.

Claim 40 (new) The nucleic acid of claim 39, wherein the nucleic acid is 20 to 50 nucleotides in length.

Claim 41 (new) The nucleic acid of claim 40, wherein the nucleic acid is 30 to 50 nucleotides in length.

Claim 42 (new) The nucleic acid of claim 6 comprising the sequence, UAANNCCGAAGGUAACCANUCCUAC, wherein N is any nucleotide.

Claim 43 (new) The nucleic acid of claim 42 comprising the sequence ACNUAANNCCGAAGGUAACCANUCCUACYYACG, wherein Y is no nucleotide or N.

Claim 44 (new) The nucleic acid of claim 43, comprising the sequence AAAACNUAANNCCGAAGGUAACCANUCCUACYYACG.

Claim 45 (new) The complex of claim 27, wherein said complex is crystalline.